

**REMARKS**

The Office Action mailed November 16, 2007 has been reviewed and carefully considered. No new matter has been added.

By this Office Action, Claim 18 has been amended. Claims 1-19 are pending.

Claim 18 has been objected to. Accordingly, Claim 18 has been amended to now depend from Claim 17. Withdrawal of the rejection is respectfully requested.

Claims 1-5, 8-12, and 15-19 stand rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 6,038,433 to Vegt (hereinafter "Vegt"). Claims 6, 7, 13, and 14 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Vegt in view of U.S. Patent Publication No. 2002/00083465A1 to Van Beek (hereinafter "Van Beek").

It is to be noted that Claims 1, 8, and 17 are the pending independent claims in the case.

Initially, a brief description of Vegt is provided. Vegt discloses the following in his Abstract:

A method for automatically searching a frequency range for signals in a receiver for digitally modulated signals is described, each channel having a center frequency, a symbol rate, and a modulation type. The method comprises the steps of scanning the frequency range in first frequency steps corresponding with just less than half the minimum expected symbol rate of the channels, measuring the RF level at each frequency step and comparing the measured RF value with a threshold value, and, if the measured RF value is below the threshold value, continuing said scanning and measuring steps until the frequency range is fully scanned, and, if the measured RF value is above the threshold value, assuming the corresponding frequency as an indication of a digitally modulated signal channel and scanning a frequency area in second frequency steps to determine the edge frequencies of the channel, said second frequency steps being much smaller than said first frequency steps, determining the center frequency of the channel from said edge frequencies, and continuing said scanning and measuring steps for further signal channels until the frequency range is fully scanned.

It is respectfully asserted that Vegt does not teach or suggest the following limitations of Claim 1:

sequentially scanning at least two selected subsets of said plurality of channels for a channel having a data signal transmitted at a predetermined modulation protocol; and  
**if the data channel scanned for in the preceding step is NOT FOUND**, further sequentially scanning at least one, but less than all, of the selected subsets of the plurality of channels for a channel having a data signal transmitted at other than said predetermined modulation protocol

It is respectfully asserted that Vegt does not teach or suggest the following limitations of Claim 8:

receiving and channel-search means operative to sequentially scan at least two selected subsets of said plurality of transmission channels for a channel having a data signal transmitted at a predetermined modulation protocol; and

the receiving and channel-search means being further operative, **upon NOT FINDING the data channel during the sequential scan**, to scan at least one, but less than all, of the selected subsets of the plurality of channels for a channel having a data signal transmitted at other than said predetermined modulation protocol.

It is respectfully asserted that Vegt does not teach or suggest the following limitations of Claim 17:

sequentially scanning at least two selected subsets of said plurality of channels for a channel having a data signal modulated thereon in accordance with symbols from one of said symbol constellations established in accordance with said known standard (the “data channel”);

**upon Not Finding the data channel in the sequential scanning step**, scanning at least one, but less than all, of the selected subsets of the plurality

of channels for a channel having a data signal modulated thereon in accordance with symbols from a symbol constellation other than one of said symbol constellations established in accordance with said known standard (the “non-standard data channel”)

Thus, in each of Claims 1 and 8, the *further* sequential scanning is performed if the **data channel** having a data signal transmitted at a predetermined modulation protocol **is NOT FOUND**, and also that the *further* sequential scanning is performed for a channel having a data signal transmitted at other than said predetermined modulation protocol.

Moreover, in Claim 17, the *further* sequential scanning is performed if the **data channel** having a data signal modulated thereon in accordance with symbols from one of said symbol constellations established in accordance with said known standard **is NOT FOUND**, and also that the *further* sequential scanning is performed for a channel having a data signal modulated thereon in accordance with symbols from a symbol constellation other than one of said symbol constellations established in accordance with said known standard.

The Examiner has cited first and second frequency steps disclosed in Vegt as corresponding to the above-recited limitations of Claims 1, 8, and 17. The Applicants respectfully disagree.

For example, in contrast to the above recited limitations of Claims 1, 8, and 17, Vegt discloses that if a data channel **IS found** using first frequency steps (see Vegt, Abstract reproduced above, and also, col. 2, line 66 to col. 3, line 18 of Vegt, as cited by the Examiner and, in particular, col. 3, lines 6-12 thereof), then the found data channel is scanned using much smaller second frequency steps to determine the edge frequencies of the found channel.

Moreover, as further disclosed at col. 3, lines 43-51 of Vegt, which further supports the above argument even more explicitly:

From the foregoing it will be clear that the invention provides a fast and efficient scanning method and receiver for applying this method, wherein the frequency range of interest is first scanned at frequency steps which are as large as possible while guaranteeing that a channel will not be skipped. **Only when a channel indication is found a fine scanning takes place to**

determine the bandwidth of the channel and thereby the symbol rate and then a modulation type is determined by trial and error.

The Applicants respectfully point out that the fine scanning referred to in the preceding reproduced section of Vegt relates the second frequency steps mentioned by the Examiner.

Further, while the last portion of the preceding reproduced section of Vegt discloses that a modulation type is determined by trial and error (see also, Vegt, col. 3, lines 29-32), such determination is ONLY AFTER the channel HAS BEEN FOUND as explicitly disclosed in Vegt (Vegt, col. 3, lines 43-51), and as argued herein as being in contrast to the limitations of Claims 1, 8, and 17.

Moreover, as noted above, Vegt uses a threshold applied against a measured RF level to ascertain whether a channel is found or not found, and simply continues scanning a frequency range as before (scan, measure, and compare, without more) when a channel is NOT FOUND (see, e.g., Vegt, Abstract). That is, no mention is made with respect thereto of a different modulation protocol, as is clear from the disclosure of Vegt (col. 3, lines 29-32 and 43-51 of Vegt), until a channel has already been found (in particular, and as a matter of fact, only after the channel and the edges (bandwidth) of the channel have been found).

Accordingly, Vegt does not teach or suggest all the above-recited limitations of Claims 1, 8, and 17. Moreover, while not cited against Claims 1, 8, and 17, it is nonetheless respectfully asserted that Van Beek does not cure the deficiencies of Vegt, and is silent with respect to the above-recited limitations of Claims 1, 8, and 17.

“A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.” MPEP §2131, citing *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987).

Accordingly, Claims 1, 8, and 17 are patentably distinct and non-obvious over the cited references for at least the reasons set forth above.

Claims 2-7 depend from Claim 1 and, thus, includes all the elements of Claim 1. Claims 9-16 depend from Claim 8 or a claim which itself is dependent from Claim 8 and, thus, include all the elements of Claim 8. Claims 18-19 depend from Claim 17 or a claim which itself is dependent from Claim 17 and, thus, include all the elements of Claim 17. Accordingly, Claims

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2-7, 9-16, and 18-19 are patentably distinct and non-obvious over the cited references for at least the reasons set forth above with respect to independent Claims 1, 8, and 17, respectively.

Thus, reconsideration of the rejections is respectfully requested.

In view of the foregoing, Applicants respectfully request that the rejection of the claims set forth in the Office Action of November 16, 2007 be withdrawn, that pending claims 1-19 be allowed, and that the case proceed to early issuance of Letters Patent in due course.

No fee is believed due with regard to the filing of this amendment. However, if a fee is due, please charge Deposit Account No. 07-0832.

Respectfully submitted,  
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